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On MAY 14, 2003

TOWNSEND and TOWNSEND and CREW LLP

By: MARK T. DAVIS

PATENT
Attorney Docket No.: 014210-000730US
Client Reference No.: OHSU Ref. No.: 386

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MAY 22 2003

TECH CENTER 1600/2900

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

ADELMAN et al.

Application No.: 09/254,590

Filed: May 24, 1999

For: SMALL AND INTERMEDIATE
CONDUCTANCE, CALCIUM-
ACTIVATED POTASSIUM
CHANNELS AND USES THEREOF

Examiner: Michael D. Pak

Art Unit: 1646

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A are being called to the attention of the Examiner. Copies of the references are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

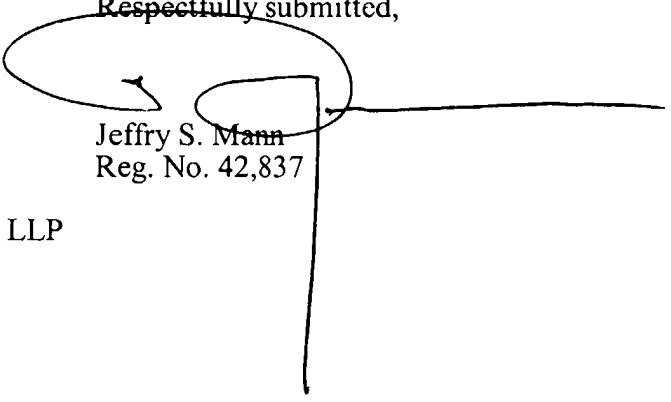
As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

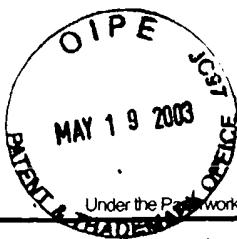
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Respectfully submitted,



Jeffrey S. Mann
Reg. No. 42,837

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PTO/SB/08B (04-03)

Approved for use through 04/30/2003. UMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Page

1

of

Complete if Known

Application Number	09/254,590
Filing Date	May 24, 1999
First Named Inventor	Adelman, John P., et. al.
Art Unit	1646
Examiner Name	Michael D. Pak
Attorney Docket Number	014210-000730US

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AA	Pak et al., "mShal, a subfamily of A-type K ⁺ channel cloned from mammalian brain", <i>Proc. Natl. Acad. Sci. USA</i> 88: 4386-4390 (1991).	
	AB	Ghanshani et al., "Genomic Organization, Nucleotide Sequence, and Cellular Distribution of a Shaw-Related Potassium Channel Gene, Kv3.3, and Mapping of Kv3.3 and Kv3.4 to Human Chromosomes 19 and 1", <i>Genomics</i> 12: 190-196 (1992).	
	AC	Ramaswami et al., "Human Potassium Channel Genes: Molecular Cloning and Functional Expression", <i>Molecular and Cellular Neurosciences</i> 1: 214-223 (1990).	
	AD	Pak et al., "A Mouse Brain Homolog of the Drosophila Shab K ⁺ Channel with Conserved Delayed-Rectifier Properties", <i>The Journal of Neurophysiology</i> 70: 1000-1008 (1993).	
	AE	Stockand et al., "Interactions of Cadmium and Nickel with K Channels of Vascular Smooth Muscle", <i>Toxicology and Applied Pharmacology</i> 121: 30-35 (1993).	

NON PATENT LITERATURE DOCUMENTS

Examiner Signature		Date Considered	
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¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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SF 1459187 v1

FEE TRANSMITTAL
for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.101(b)(2).

TOTAL AMOUNT OF PAYMENT (\$ 180

Application Number 09/254,590
Filing Date May 24, 1999
First Named Inventor Adelman, John P.
Examiner Name Michael D. Pak
Art Unit 1646
Attorney Docket No. 014210-000730US

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METHOD OF PAYMENT (check all that apply)
☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
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Number

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Deposit
Account
Name

Townsend and Townsend and Crew LLP

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee
to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1001	750	2001	375	Utility filing fee
1002	330	2002	165	Design filing fee
1003	520	2003	260	Plant filing fee
1004	750	2004	375	Reissue filing fee
1005	160	2005	80	Provisional filing fee

Fee Paid

SUBTOTAL (1)

(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Total Claims	Independent Claims	Multiple Dependent	Extra Claims	Fees from below	Fee Paid
				** =	X	
				** =	X	
				X		

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large	Entity	Small	Entity	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Petitions related to provisional applications	
1806	180	1806	180	Submission of Information Disclosure Stmt	180
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$180)

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)

Jeffrey S. Mann

Registration No. (Attorney/Agent)

42,837

Telephone

415-576-0200

Signature

Date

5/14/2003

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